

## REMARKS

This is intended as a full and complete response to the Final Office Action dated June 27, 2003, having a shortened statutory period for response extending one month to and including October 27, 2003. This is also intended as an interview summary of the interview with the Examiner on October 27, 2003. Please reconsider the claims pending in the application for reasons discussed below.

On October 27, 2003, the Examiner and Keith Tackett discussed the Advisory Action that was mailed on October 15, 2003 and the references *Wang, et al.* (U.S. Patent No. 5,000,113) and *Crawley, et al.* (U.S. Patent No. 5,871,586). The Examiner agreed with Mr. Tackett that the rejections of the pending claims over *Wang, et al.* and *Crawley, et al.* should be withdrawn. This response provides the arguments that Mr. Tackett discussed with the Examiner.

Claim 120 is objected to. Claims 100-120, 122, and 123 are rejected. Applicants have canceled claims 100-120, 122, and 123. Applicants submit that the changes made herein reduce the issues for appeal.

Claim 121 is rejected under 35 U.S.C. § 102(b) as being anticipated by *Wang, et al.* (U.S. Patent No. 5,000,113). In the Advisory Action mailed October 15, 2003, the Examiner states that the elements 98/100/102 of *Wang, et al.* can be considered both feedthroughs and feedthrough holes since the word hole implies a two dimensional structure without a depth. Applicants respectfully traverse the rejection.

Applicants submit that elements 98/100/102 of *Wang, et al.* do not provide both a feedthrough hole and a feedthrough disposed in a feedthrough hole. A feedthrough is a physical object, as shown and described in Applicant's specification and drawings, rather than a hole. For example, a feedthrough 54 disposed in a feedthrough channel 57 to connect a retaining ring 47 to a chamber lid 48 is shown and described on page 10, line 28 to page 11, line 22 and in Figure 8 of the instant application. In view of Mr. Tackett's explanation of Figure 8, the Examiner agreed that *Wang, et al.* does not show feedthrough disposed in a feedthrough hole. As *Wang, et al.* does not teach or suggest a feedthrough disposed in a feedthrough hole, *Wang, et al.* does not provide all of the limitations of the pending claims.

*Wang, et al.* does not teach, show, or suggest a processing chamber comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring coupled to the chamber body, wherein the retaining ring has a feedthrough hole formed therein, a chamber lid coupled to the retaining ring, wherein the chamber lid forms a fluid inlet, a fluid outlet, and a temperature control channel, and wherein the temperature control channel is fluidly connected to the fluid inlet and fluid outlet, and a feedthrough disposed in a feedthrough hole, wherein the feedthrough is fluidly connected to the temperature control channel, and wherein the feedthrough attaches the chamber lid to the retaining ring, as recited in claim 121. Applicants respectfully request withdrawal of the rejection of claim 121.

Claims 81-92 and 121 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Crawley, et al.* The Examiner states that *Crawley, et al.* describes a chamber lid assembly 7 connected to the retaining ring 8 by one or more feedthroughs (Figure 2). Applicants respectfully traverse the rejection.

Mr. Tackett requested clarification of the Examiner's finding of the elements of claim 81 in *Crawley, et al.* The Examiner stated that *Crawley, et al.* includes a lid 7, a retaining ring 8 and 9, and a feedthrough including 8, 31, and 33. The Examiner agreed with Mr. Tackett that plates 17 and 19 of *Crawley, et al.* are not part of the lid 7 and that *Crawley, et al.* does not show a chamber lid comprising a first plate coupled to a second plate, wherein the first plate and the second plate form a temperature control channel. Thus, Applicants submit that *Crawley, et al.* does not teach, show, or suggest a processing chamber, comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring having one or more feedthrough holes formed therein, one or more feedthroughs disposed in the one or more feedthrough holes, a chamber lid connected to the retaining ring by the one or more feedthroughs, the chamber lid comprising a first plate coupled to a second plate, wherein the first plate and the second plate form a temperature control channel, and a fluid inlet and a fluid outlet formed in the chamber lid, wherein the fluid inlet and the fluid outlet are fluidly coupled to the one or more feedthroughs, as recited in claim 81. Applicants respectfully request withdrawal of the rejection of claim 81 and of claims 82-92, which depend thereon.

*Crawley, et al.* does not show or describe a chamber lid that forms a temperature control channel, as described in claim 121. Applicants submit that *Crawley, et al.* does not teach, show, or suggest a processing chamber comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring coupled to the chamber body, wherein the retaining ring has a feedthrough hole formed therein, a chamber lid coupled to the retaining ring, wherein the chamber lid forms a fluid inlet, a fluid outlet, and a temperature control channel, and wherein the temperature control channel is fluidly connected to the fluid inlet and fluid outlet, and a feedthrough disposed in a feedthrough hole, wherein the feedthrough is fluidly connected to the temperature control channel, and wherein the feedthrough attaches the chamber lid to the retaining ring, as recited in claim 121. Applicants respectfully request withdrawal of the rejection of claim 121.

Claims 93-99 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Crawley, et al.* As claims 93-99 include the limitations of claim 81, Applicants submit that claims 93-99 are patentable over *Crawley, et al.* for the reasons discussed above with respect to claim 81. Applicants respectfully request withdrawal of the rejection of claims 93-99.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or apparatus of the present invention. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

RECEIVED  
CENTRAL FAX CENTER  
OCT 27 2003

Respectfully submitted,



Keith M. Tackett  
Registration No. 32,008

OFFICIAL

Oct-27-03 05:39pm From-Moser, Patterson & Sheridan L.L.P. +713 623 4846 T-466 P.011/011 F-105

PATENT  
Atty. Dkt. No. AMAT/2922.Y1/ETCH/DRIE/JB1

MOSEY, PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd., Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)